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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,242	11/19/2003	Imtiaz Zafar	DP-309090	6879

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DELPHI TECHNOLOGIES, INC.
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EXAMINER

GESESSE, TILAHUN

ART UNIT	PAPER NUMBER
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2618

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/717,242	ZAFAR ET AL.	
	Examiner	Art Unit	
	Tilahun B. Gesesse	2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 1/23/07 have been fully considered but they are not persuasive for the following reasons.
2. On page 9, third paragraph of applicant's response, applicant argued that Petros fails to teach "integrated stationary head unit positioned on the surface including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver / tuner human interface".

The examiner disagrees. Petros teaches integrated stationary head unit positioned on the surface including an AM/FM terrestrial receiver/tuner human interface and a satellite receiver / tuner human interface (a combined multi-band terrestrial and satellite antenna system includes satellite 314 , SDARS/RX audio cable and combined head unit and AM/FM tuner 328, see column 3, lines 33-68 and column 4, line 1-19 and column 5, lines 41-65 and figure 3).

On page 9, fourth paragraph of response applicant argued that Petros teach a radio head unit in communication with a separate SDARS receiver, wherein the SDARS receiver is located remotely from the radio head unit.

The examiner disagrees. Petros teaches combine SDARS and radio receiver head unit combined or integrated not separated as applicant mischaracterizes the Petros reference.

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Further more, applicant does not provide that SDARS receiver is located remotely from the radio head unit.

Petros teaches combined or integrated SDARS receiver and AM/FM receiver head unit as human interface device (see column 3, lines 55-68, in particular col.3 lines 55-61 and figure 3 items # 328 and 320 and abstract, column 8, lines 18-58 and figure 88, in particular fig.8 items 320 and 328) where clearly shows that satellite receiver and radio receiver integrated head unit (328 of figure 8).

On page 10, third paragraph of response applicant argued that dependent claim 12, Petros does not teach a satellite low noise amplifier with a first input connected to a first end of a satellite output .

The examiner disagrees. Petros teaches a satellite low noise amplifier LNA 704 of figure 8, where LNA 704 has a first input (702) connected to a first end of a satellite output (312 of figure 8 and see column 3, lines 55-68).

To summarize, the above addressed, response to applicant argument and Petros teaches to broadly recited claim invention , the applied prior art to reject applicant invention is proper and maintained .

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-3,7-8,12-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Petros et al (US 6,806,838)"Petros".

Claim 1. Petros teaches a stationary terrestrial/satellite antenna and receiver system for reception of AM, FM, satellite and terrestrial rebroadcast satellite signals, (see abstract and fig.3) comprising:

Petros teaches a stationary satellite antenna positioned on a surface that receives satellite signals and terrestrial rebroadcast satellite signals (see col.5, lines 42-65 and figs.3 and 7-8).

Petros teaches a stationary terrestrial antenna positioned on the surface that receives AM/FM signals, the satellite and terrestrial antenna are mounted on a mounting assembly including a low noise amplifier circuit and a bezel, the bezel is adapted to contain the low noise amplifier (see col.2, lines 34-64).

Petros teaches a stationary integrated head unit positioned on the surface (see fig.3).

Petros teaches a terrestrial receiver/tuner human interface and a satellite receiver/tuner human interface, wherein the terrestrial antenna is connected to the terrestrial receiver/tuner human interface and the satellite antenna is connected to the satellite receiver/tuner human interface via a conduit (see col.5, lines 42-65 and fig.3, and 7-8 and column 3, lines 55-68, in particular col.3 lines 55-61 and figure 3 items # 328 and 320 and abstract, column 8, lines 18-58 and figure 88, in particular fig.8 items

320 and 328) where clearly shows that satellite receiver and radio receiver integrated head unit (328 of figure 8).

Claim 2, Petros teaches the satellite signals received by the satellite antenna are SDARS signals (col.3, lines 43-68).

Claim 3, Petros teaches the satellite antenna comprises: a quadrilar helix antenna (col.5, lines 6-20 and col. 6, lines 1-13)

Claim 7, Petros teaches the terrestrial antenna comprises: a retractable mast antenna (see abstract).

Claim 8, Petros teaches the terrestrial antenna comprises: an AM antenna and an FM wire antenna (col. 3,lines 42-65).

Claim 12, Petros teaches the low noise amplifier circuit comprises: a satellite low noise amplifier with a first input connected to a first end of a satellite output, wherein the output of the low noise amplifier is the SDARS/SAT/TER cable (see figs.3 and 7-8).

Claim 13, Petros teaches the surface is selected from the group consisting of an desk, table, countertop, or window glass (col.5, lines 20-40 and fig.2).

Claim 14, Petros teaches the satellite and terrestrial antenna is disposed in a housing (see figs 2-3).

Claim 15, Petros teaches the stationary satellite antenna is concentrically mounted with respect to the terrestrial antenna (see figs 3 and 7-8).

Claim 16, Petros teaches the terrestrial antenna is a retractable terrestrial antenna (col. 4,line 57-col.5, line 5).

Claim 17, Petros teaches the conduit includes a satellite-cable, a satellite-

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terrestrial rebroadcast cable and a terrestrial cable(see figs. 3,7-8 and col. 4,line 57-col.5, line 5).

Claim 18, Petros teaches the conduit includes a single element satellite-terrestrial-rebroadcast-satellite cable and a terrestrial AM/FM cable (col. 4,line 57-col.5, line 5 and figs 3 and 7-8).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4-6 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petros in view of Zafar et al (US 7,064,721) .

Claims 4-6 and 9-11, Petros does not teach a patch antenna, a loop antenna, dipole. However , Zafar teaches a patch antenna, a loop antenna, dipole (col.7, lines 8-46).

One of ordinary skill in the art would be motivated to combine Petros and Zafar in order to improve Petros in installing patch , loop and dipole antenna for better reception of signals.

Both Petros and Zafar teaches satellite and radio broadcast techniques, then it would have been obvious to an artisan of ordinary skill in the art at the time of the

invention was made to use antennas of various design, in Petros system, as evidenced by Zafar, for better tuning the broadcast signal in any angle of reception.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899.

The Central FAX Number is 571-273-8300. For patent related correspondence, hand carry deliveries must be made to the Customer Service

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Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number .

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TG


TILAHUN GESESSE
PRIMARY EXAMINER

March 21, 2007